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(71) Applicant (for all designated States except US): CALIFORNIA INSTITUTE OF TECHNOLOGY [US/US]; 1200 E. California Boulevard, MS 16-30, Pasadena, CA 91125 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): DERVAN, Peter, B. [US/US]; California Institute of Technology, 1200 E. California Boulevard, MS 16-30, Pasadena, CA 91125 (US).

(74) Agents: CHAMBERS, Daniel, M. et al.; Lyon & Lyon LLP, Suite 4700, 633 West Fifth Street, Los Angeles, CA 90071-2066 (US).

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(54) Title: REGULATION OF HER2/neu ONCOGENE EXPRESSION BY SYNTHETIC POLYAMIDES

(57) Abstract

Methods and compositions comprising polyamides capable of binding the minor groove of double-stranded DNA are described for the inhibition or reduction or gene transcription and expression. The polyamides comprise at least four complementary pairs of aromatic carboxamide residues which are selected to specifically contact and/or bind to the nucleotide sequence of a double-stranded DNA target in the promoter region of the target gene. The methods, compositions, and polyamides are disclosed for the inhibition of oncogene transcription and expression as well as the treatment of cancer.